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(formerly TSRI 184.2C2)

**REMARKS**

Claims 15-27, 29-65, and 83-92 are pending. Claim 92 has been amended. The amendments are supported by the specification and raise no issue of new matter nor raise any issue requiring further search. The changes to claim 92 are minor in nature have not been made to obviate prior art.

**REJECTION UNDER 35 U.S.C. § 112, SECOND PARAGRAPH**

Claim 92 and dependent claims have been rejected under 35 U.S.C. § 112, second paragraph as allegedly being indefinite in the recitation of "said nucleotide sequences also encodes" (see line 7). Claim 92 has been amended as suggested by the examiner. Accordingly, withdrawal of the rejection is respectfully requested.

**REJECTION UNDER 35 U.S.C. § 103**

**U.S. Patent 6,417,429**

Claims 15-27, 29-65, and 83-92 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 6,417,429 (Hein et al.). The examiner alleges that the reference is prior art under 102(e). The rejection is respectfully traversed.

It is respectfully submitted that the reference is not prior art under Section 102(e) because it is not "by another." The named inventors of U.S. Patent 6,417,429 are Hein and Hiatt. Although the instant application was originally filed naming Hein, Hiatt and Ma as inventors, Applicant requested removal of Ma as an inventor in the request for a Continued Prosecution Application mailed Feb. 13, 2002. See page 1 of transmittal, copy attached as Exhibit A. Accordingly, as the inventive entity of the instant claims and that of the reference is identical, the rejection is without basis and should be withdrawn.

Furthermore, the reference is not "prior" to the instantly filed application. U.S. Patent 6,417,429 (Hein et al.) issued on July 9, 2002 from U.S. application serial no. 199,534 filed Nov. 25, 1998, which application is a continuation of U.S. application Ser.

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No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

The instantly filed application is a divisional of 09/200,657, filed Nov. 25, 1998, (pending) which application is continuation of U.S. application Ser. No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of continuation of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

Thus, the instant application and U.S. Patent 6,417,429 (Hein et al.) both claim priority to Oct. 27, 1989. Accordingly, as the reference is not prior in time to the filing date of the instant claims, the rejection is without basis and should be withdrawn.

U.S. Patent 6,303,341

Claims 15-27, 29-65, and 83-92 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 6,303,341 (Hiatt et al.). The examiner alleges that the reference is prior art under 102(e). The rejection is respectfully traversed.

It is respectfully submitted that the reference is not prior art under Section 102(e) because it does not have an effective filing date that is prior to that of the instant application. U.S. Patent 6,303,341 issued from U.S. application serial no. 312,157, filed May 14, 1999, which application is a continuation of application Ser. No. 08/434,000, filed May 4, 1995 (issued as U.S. Pat. No. 6,046,037), which application is a continuation-in-art of application Ser. No. 08/367,395, filed Dec. 30, 1994 (abandoned).

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In contrast, the instantly filed application is a divisional of 09/200,657, filed Nov. 25, 1998, (pending), which application is continuation of U.S. application Ser. No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of continuation of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

Thus, U.S. Patent 6,303,341 is not prior art under 102(e) because its earliest priority date (Dec. 30, 1994) is later than Oct. 27, 1989, the priority date of the instant application. Accordingly, the rejection is without basis and should be withdrawn.

U.S. Patent 6,046,037

Claims 15-27, 29-65, and 83-92 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 6,046,037 (Hiatt et al.). The examiner alleges that the reference is prior art under 102(e). The rejection is respectfully traversed.

It is respectfully submitted that the reference is not prior art under Section 102(e) because it does not have an effective filing date that is prior to that of the instant application. U.S. Patent 6,046,037 issued from U.S. application serial no. 434,000, filed May 4, 1995, which application is a continuation-in-art of application Ser. No. 08/367,395, filed Dec. 30, 1994 (abandoned).

In contrast, the instantly filed application is a divisional of 09/200,657, filed Nov. 25, 1998, (pending), which application is continuation of U.S. application Ser. No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of continuation of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

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Thus, U.S. Patent 6,046,037 is not prior art under 102(e) because its earliest priority date (Dec. 30, 1994) is later than Oct. 27, 1989, the priority date of the instant application. Accordingly, the rejection is without basis and should be withdrawn.

U.S. Patent 5,639,947

Claims 15-27, 29-65, and 83-92 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 5,639,947 (Hiatt et al.). The examiner alleges that the reference is prior art under 102(e). The rejection is respectfully traversed.

It is respectfully submitted that the reference is not prior art under Section 102(e) because it is not "by another." The named inventors of U.S. Patent 5,639,947 are Hiatt and Hein. Although the instant application was originally filed naming Hein, Hiatt and Ma as inventors, Applicant requested removal of Ma as an inventor in the request for a Continued Prosecution Application mailed Feb. 13, 2002. See page 1 of transmittal, copy attached as Exhibit A. Accordingly, the rejection is without basis and should be withdrawn.

Furthermore, the reference is not "prior" to the instantly filed application. U.S. Patent 5,639,947 (Hiatt et al.) issued on June 17, 1997 from U.S. application serial no. 07/971,951, filed Nov. 5, 1992, which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

The instantly filed application is a divisional of 09/200,657, filed Nov. 25, 1998, (pending), which application is continuation of U.S. application Ser. No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of continuation of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

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Thus, the instant application and U.S. Patent 5,639,947 (Hiatt et al.) both claim priority to Oct. 27, 1989. Accordingly, the reference is not by definition prior art.

U.S. Patent 5,202,422

Claims 15-27, 29-65, and 83-92 have been rejected under 35 U.S.C. § 103(a) as allegedly being obvious over U.S. Patent 5,202,422 (Hein et al.). The examiner alleges that the reference is prior art under 102(e). The rejection is respectfully traversed.

It is respectfully submitted that the reference is not prior art under Section 102(e) because it is not "by another." The named inventors of U.S. Patent 5,202,422 are Hiatt and Hein. Although the instant application was originally filed naming Hein, Hiatt and Ma as inventors, Applicant requested removal of Ma as an inventor in the request for a Continued Prosecution Application mailed Feb. 13, 2002. See page 1 of transmittal, copy attached as Exhibit A. Accordingly, the rejection is without basis and should be withdrawn.

Furthermore, the reference is not "prior" to the instantly filed application. U.S. Patent 5,202,422 (Hiatt et al.) issued on April 13, 1993 from U.S. application serial no. 07/591,823, filed Oct. 2, 1990, which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

The instantly filed application is a divisional of 09/200,657, filed Nov. 25, 1998, (pending) which application is continuation of U.S. application Ser. No. 08/642,406, filed May 3, 1996 (issued as U.S. Pat. No. 5,959,177), which application is a continuation-in-part of continuation of U.S. application Ser. No. 07/971,951, filed Nov. 5, 1992 (issued as U.S. Pat. No. 5,639,947), which application is a continuation of U.S. application Ser. No. 07/591,823, filed Oct. 2, 1990, (issued as U.S. Pat. No. 5,202,422), which application is a continuation-in-part of U.S. application Ser. No. 07/427,765, filed Oct. 27, 1989 (abandoned).

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Thus, the instant application and U.S. Patent 5,202,422 (Hiatt et al.) both claim priority to Oct. 27, 1989. Accordingly, as the reference is not prior in time to the filing date of the instant claims, the rejection is without basis and should be withdrawn.

#### DOUBLE PATENTING

##### U.S. Patent 5,959,177

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-12 of U.S. Patent 5,959,177 (Hein et al.). Although Applicant does not agree with the rejection, nevertheless, in order to expedite prosecution of the case, a terminal disclaimer obviating the rejection is attached herewith.

##### U.S. Patent 6,417,429

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-69 of U.S. Patent 6,417,429 (Hein et al.). Although Applicant does not agree with the rejection, nevertheless, in order to expedite prosecution of the case, a terminal disclaimer obviating the rejection is attached herewith.

##### U.S. Patent 6,303,341

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-53 of U.S. Patent 6,303,341 (Hiatt et al.). The rejection is respectfully traversed.

It is respectfully submitted that the instant claims are not obvious over the claims 1-53 of U.S. Patent no. 6,303,341. The latter claims are directed to forms of an immunoglobulin comprising a protection protein in association with an immunoglobulin derived heavy chain having at least a portion of an antigen binding domain, wherein said protection protein is derived from the secretory component of an immunoglobulin receptor, compositions comprising the forms of immunoglobulin, and methods of production. It is

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respectfully pointed out that the claims of the prior patent were issued (and therefore deemed non-obvious) over the disclosure of both U.S. Patent no. 5,202,422 and 5,959,177, patents which disclose and support the invention of the instant claims.

Furthermore, it is noted that the Patent has previously taken the position in U.S. application serial no. 08/642,406 that transgenic plants are patentably distinct from methods of passive immunization using plant derived antibody. Office Action 7/22/97, attached as Exhibit B.

Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

U.S. Patent 6,046,037

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-24 of U.S. Patent 6,046,037 (Hiatt et al.). The rejection is respectfully traversed.

It is respectfully submitted that the instant claims are not obvious variants over the claims 1-24 of U.S. Patent no. 6,046,037. The latter claims are directed to a transgenic plant comprising an immunoglobulin comprising a protection protein derived from an immunoglobulin receptor in association with an immunoglobulin derived heavy chain having at least a portion of an antigen binding domain, or a transgenic plant comprising a protection protein derived from an immunoglobulin receptor. It is respectfully pointed out that the claims of the prior patent were issued (and therefore deemed non-obvious) over the disclosure of WO 91/06320, published May 16, 1991, a publication which discloses and supports the invention of the instant claims.

Furthermore, it is noted that the Patent has previously taken the position in U.S. application serial no. 08/642,406 that transgenic plants are patentably distinct from methods of passive immunization using plant derived antibody. Office Action 7/22/97, attached as Exhibit B.

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Accordingly, the Examiner is respectfully requested to reconsider and withdraw the rejection.

U.S. Patent 5,639,947

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-11 of U.S. Patent 5,639,947 (Hiatt et al.). Although Applicant does not agree with the rejection, nevertheless, in order to expedite prosecution of the case, a terminal disclaimer obviating the rejection is attached herewith.

U.S. Patent 5,202,422

Claims 15-27, 29-65, and 83-92 have been rejected under the judicially created doctrine of obviousness type double patenting as allegedly being unpatentable over claims 1-5 of U.S. Patent 5,202,422 (Hiatt et al.). Although Applicant does not agree with the rejection, nevertheless, in order to expedite prosecution of the case, a terminal disclaimer obviating the rejection is attached herewith.

Applicant believes that the present application is now in condition for allowance. Favorable reconsideration of the application as amended is respectfully requested.

The Examiner is urged to contact the undersigned by telephone to address any outstanding issues standing in the way of an allowance.

Respectfully submitted,

By Barry S. Wilson  
Barry S. Wilson  
Attorney for Applicant  
Registration No. 39,431

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FOLEY & LARDNER, LLP

Customer Number: 30542



30542

PATENT TRADEMARK OFFICE

Telephone: (858) 847-6722

Faxsimile: (858) 792-6773